

in this fluid some time, the external investment bursts, and allows the protrusion of globular masses of sarcoous matter, as in *Leucophrys*, but not to such a great extent.—*Proceedings of the Academy of Natural Sciences of Philadelphia*, vol. iv. p. 233.

METEOROLOGICAL OBSERVATIONS FOR DEC. 1849.

*Chiswick*.—December 1. Very fine. 2. Heavy rain throughout. 3. Rain. 4. Hazy clouds: fine: frosty. 5. Rain with fog: overcast at night: slight frost. 6. Clear sky and low ground-fog: exceedingly fine. 7. Overcast. 8. Rain: cloudless, and very fine. 9. Frosty and foggy: fine: dense fog. 10. Foggy: uniform haze: overcast. 11. Overcast. 12. Foggy: cloudy and cold. 13. Slight drizzle: hazy. 14. Rain: drizzly. 15. Rain: clear at night. 16. Cloudy: very fine: drizzly. 17. Boisterous: fine: clear. 18. Densely overcast: rain. 19. Cloudy: fine: clear. 20. Clear and fine. 21. Slight snow-showers. 22. Frosty: densely clouded. 23. Clear and frosty: cloudless: clear and frosty. 24. Hazy: slight snow: cloudy at night. 25. Clear and fine. 26. Drizzly: densely overcast. 27. Clear. 28. Drifting snow: clear and frosty throughout: severe frost at night. 29. Cloudy: clear. 30. Clear. 31. Cloudy: fine: overcast.

Mean temperature of the month .....	37°·17
Mean temperature of Dec. 1848 .....	41 ·75
Mean temperature of Dec. for the last twenty-three years	39 ·85
Average amount of rain in December .....	1·58 inch.

*Boston*.—Dec. 1. Fine. 2. Rain: rain A.M. and P.M. 3. Rain: rain A.M. 4. Fine. 5. Cloudy: rain A.M. and P.M. 6. Fine. 7. Cloudy. 8. Rain: rain A.M. 9. Fine. 10. Cloudy. 11. Rain: rain A.M. and P.M. 12. Fine. 13, 14. Cloudy. 15. Cloudy: rain A.M. and P.M. 16. Fine. 17. Cloudy: rain early A.M. 18. Cloudy: rain A.M. and P.M. 19. Fine: rain A.M. and stormy. 20. Fine. 21. Cloudy: rain A.M. 22. Cloudy. 23. Fine. 24. Cloudy: rain A.M. 25. Cloudy. 26. Fine. 27, 28. Fine: stormy. 29. Fine: snow A.M. 30. Fine. 31. Cloudy.

*Applegarth Manse, Dumfries-shire*.—Dec. 1. Frost A.M.: fog: wet P.M. 2. Storm of wind and rain. 3. Blowing hard: wet: calm P.M. 4. Fine clear frosty day. 5. Snow A.M.: wet P.M. 6. Rain and wind. 7. High wind: rain P.M. 8. Rain, but not heavy. 9. Fog and light rain. 10. Fog all day. 11. Fair and frosty. 12. Clear and cold. 13. Dull and cold: sleet P.M. 14. Fine A.M.: cloudy and stormy P.M. 15. Foggy, with showers. 16. Fine A.M.: dull and damp P.M. 17. Fine, with slight showers. 18. Wet all day. 19, 20. Slight frost: fine. 21. Slight frost: fine: cloudy. 22. Slight frost: clear and fine. 23. Hard frost: cloudy P.M. 24. Change: soft: slight shower. 25. Frost again: mild P.M. 26. Slight frost: shower P.M. 27. Frost: clear: high wind P.M. 28, 29. Very hard frost: sprinkling of snow. 30. Frost: clear and fine. 31. Frost very hard: thermometer 18°.

Mean temperature of the month .....	37°·1
Mean temperature of Dec. 1848 .....	39 ·8
Mean temperature of Dec. for the last twenty-five years ...	38 ·1
Mean rain in December .....	1·40 inch.
Ditto average for twenty years in December .....	2·94 inches.

*Sandwick Manse, Orkney*.—Dec. 1. Fine: cloudy. 2, 3. Showers. 4. Snow-showers. 5. Showers. 6. Cloudy: clear. 7. Cloudy: drizzle. 8. Showers: drizzle. 9. Cloudy: showers: rain. 10. Drizzle: clear: aurora. 11, 12. Cloudy: clear: aurora. 13. Cloudy. 14. Rain: cloudy. 15. Cloudy: showers. 16. Rain: showers: clear. 17. Cloudy: showers. 18. Showers: damp: showers. 19. Bright: showers: sleet. 20. Fine: frost: fine. 21. Fine: frost: aurora. 22. Clear: frost: hazy. 23. Rain: cloudy. 24. Fine: damp. 25, 26. Showers. 27. Hail-showers. 28. Snow-drift: thunder: snow-drift. 29. Cloudy: clear. 30. Showers: cloudy. 31. Clear: cloudy.